

CLAIMS

Sub A

Sub B

Sub C

Sub D

Sub E

Sub F

Sub G

Sub H

Sub I

Sub J

Sub K

Sub L

Sub M

Sub N

Sub O

Sub P

Sub Q

Sub R

Sub S

Sub T

Sub U

Sub V

Sub W

Sub X

Sub Y

Sub Z

1. A method for determining a refinish colorcoat composition that matches the color and color effect of a vehicle's original refinish, which comprises in any workable order:

- (a) gathering the VIN (vehicle identification number) and manufacturer's paint code from a vehicle needing refinishing;
- (b) extracting from the VIN the model year and manufacturing site information for that vehicle;
- (c) searching a database that contains the manufacturer's paint codes, refinish data assigned to each paint code that indicates the matching refinish colorcoat compositions created for that particular paint code, and VIN numbers assigned to each refinish colorcoat composition that indicates the model year and manufacturing site for which that particular refinish colorcoat composition was developed; and,
- (d) identifying the refinish colorcoat composition in the database that matches the paint code, model year, and manufacturing site extracted from the vehicle, thereby revealing the refinish colorcoat composition that matches the color and color effect of the vehicle's original finish.

2. ~~The method of claim 1 as practiced by a computer acting under a program.~~

3. A method for determining a refinish colorcoat composition that matches the color and color effect of a vehicle's original refinish, which comprises in any workable order:

- (a) gathering the VIN (vehicle identification number), manufacturer's paint code, and manufacture date from a vehicle needing refinishing;
- (b) extracting from the VIN the model year and manufacturing site information for that vehicle;
- (c) searching a database that contains the manufacturer's paint codes, refinish data assigned to each paint code that indicates the matching refinish colorcoat compositions created for that particular paint code, VIN numbers assigned to each refinish colorcoat composition that indicates the model year and manufacturing site for which that particular refinish colorcoat composition was developed, and manufacturing dates assigned to each refinish colorcoat composition that indicates the manufacture dates for which that particular refinish composition is applicable; and,
- (d) identifying the refinish colorcoat composition in the database that matches the paint code, model year, manufacturing site, and manufacture date

extracted from the vehicle, thereby revealing the refinish colorcoat composition that matches the color and color effect of the vehicle's original finish.

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4. The method of claim 3 as practiced by a computer acting under a program.

5. A computer-controlled method for determining a refinish colorcoat composition, suited for refinishing monocoat, clearcoat/colorcoat, and tricoat finishes of vehicles, that matches the color and color effect of the vehicle's original finish within an acceptable color tolerance, which comprises in any workable order:

- (a) inputting the vehicle's VIN (vehicle identification number) into a computer configured to receive such information;
- (b) inputting the manufacturer's paint code for the vehicle in question into the computer also configured to receive such information;
- (c) processing the input data by extracting from the VIN number the characters in the positions that indicate, at least, the model year and site of manufacture for the vehicle being refinished, and placing these characters in a VIN id string;
- (d) accessing a computer-readable data file that contains the manufacturer's paint codes, refinish data assigned to each paint code that indicates all the approved matching refinish colorcoat compositions created for that particular paint code, and a VIN id string assigned to each refinish colorcoat composition that indicates, at least, the model year and manufacturing site for which that particular refinish colorcoat composition was developed;
- (e) executing a search for a refinish colorcoat composition in the computer-readable data file that has assigned thereto a paint code and a VIN id string that match both the paint code and VIN id string of the vehicle in question;
- (f) displaying in human-readable form the refinish colorcoat composition uncovered in the search, thereby revealing the refinish colorcoat composition that matches the color and color effect of the original finish of the vehicle in question within an acceptable color tolerance.

6. The method of claim 5, further comprising:

- (g) preparing an actual refinish colorcoat composition from the composition displayed; and,
- (h) applying the prepared refinish colorcoat composition to an area of the vehicle requiring repair or refinishing.

7. A computer-controlled method for determining a refinish colorcoat composition, suited for refinishing monocoat, clearcoat/colorcoat, and tricoat finishes of vehicles, that matches the color and color effect of the vehicle's original finish within an acceptable color tolerance, which comprises in any workable order:

- (a) inputting the vehicle's VIN (vehicle identification number) into a computer configured to receive such information;
- (b) inputting the manufacturer's paint code for the vehicle in question into the computer also configured to receive such information;
- (c) inputting the vehicle's manufacture date into the computer also configured to receive such information;
- (d) processing the input data by extracting from the VIN number the characters in the positions that indicate, at least, the model year and site of manufacture for the vehicle being refinished, and placing these characters in a VIN id string;
- (e) accessing a computer-readable data file that contains the manufacturer's paint codes, refinish data assigned to each paint code that indicates all the approved matching refinish colorcoat compositions created for that particular paint code, a VIN id string assigned to each refinish colorcoat composition that indicates, at least, the model year and manufacturing site for which that particular refinish colorcoat composition was developed; and manufacturing dates assigned to each refinish colorcoat composition that indicates the manufacture dates for which that particular refinish composition is applicable;
- (f) executing a search for a refinish colorcoat composition in the computer-readable data file that has assigned thereto a paint code, a VIN id string, and a manufacturing date that match both the paint code, VIN id string, and the manufacturing date of the vehicle in question;
- (g) displaying in human-readable form the refinish colorcoat composition uncovered in the search, thereby revealing the refinish colorcoat composition that matches the color and color effect of the original finish of the vehicle in question within an acceptable color tolerance.

8. The method of claim 7, further comprising:

- (h) preparing an actual refinish colorcoat composition from the composition displayed; and,
- (i) applying the prepared refinish colorcoat composition to an area of the vehicle requiring repair or refinishing.

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9. A computer system for retrieving a refinish colorcoat composition that matches the color and color effect of the vehicle's original finish, which comprises a computer that performs the method of claim 1.

10. A computer system for retrieving a refinish colorcoat composition that matches the color and color effect of the vehicle's original finish, which comprises a computer that performs the method of claim 3.

11. A method for determining a refinish colorcoat composition that matches the color and color effect of a vehicle's original refinish, which comprises in any workable order:

- (a) ascertaining the manufacturer's paint code, model year, site of manufacture, and optionally date of manufacture of a vehicle needing refinishing;
- (b) searching a database of refinish colorcoat compositions wherein each refinish composition in the database has assigned thereto a manufacturer's paint code, a vehicle model year, a vehicle site of manufacture, and optionally a vehicle manufacture date; and,
- (d) identifying the refinish colorcoat composition in the database that matches the paint code, model year, manufacturing site, and optionally manufacturing date extracted from the vehicle, thereby revealing the refinish colorcoat composition that matches the color and color effect of the vehicle's original finish.

12. The method of claim 11 as practiced by a computer acting under a program.

13. The method of claim 11 wherein the model year and site of manufacture are ascertained from the VIN (vehicle identification number).